REPLACEMENT DRAWINGS Title: ERBB HETERODIMERS AS BIOMARKERS Inventor(s): Po-Ying Chan-Hui et al. Atty. Docket No.: 25237-12978 Sheet 1 of 36

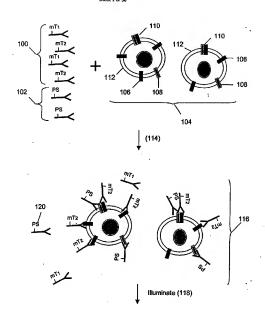


Fig. 1A

REPLACEMENT DRAWINGS
Title: ERBB HETERODIMERS AS BIOMARKERS
Invertor(s): Po-Ying Chan-Hul et al.
Atty, Docket No.: 25237-12978
Sheet 2 of 36

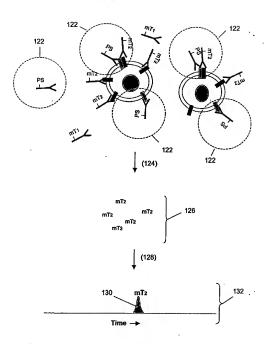


Fig. 1B

## Measurement of Cell Surface Receptor Dimers

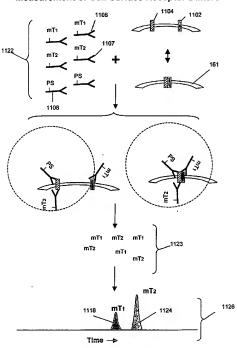


Fig. 1C

## Homodimers

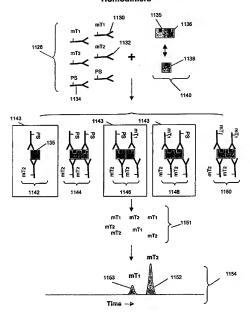


Fig. 1D

REPLACEMENT DRAWINGS
TItie: ERBB HETERODIMERS AS BIOMARKERS
Inventor(s): Po-Ying Chan-Hul et al.
Atty. Docket No.: 25237-12978
Sheet 5 of 35

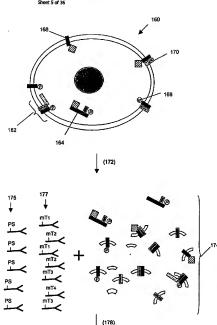


Fig. 1E

REPLACEMENT DRAWINGS
Titie: ERBB HETERODIMERS AS BIOMARKERS
Inventor(s): Po-Ying Chan-Hul et al.
Atty, Docket No.: 25237-12978
Sheet 6 of 36

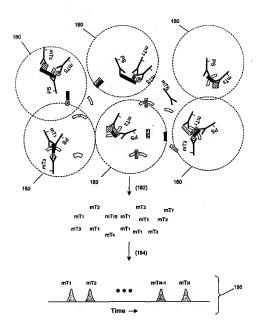


Fig. 1F

REPLACEMENT DRAWINGS
Title: ERBB HETERODIMERS AS BIOMARKERS
Inventor(s): Po-Ying Chan-Hui et al.
Atty. Docket No.: 25237-12978
Sheet 7 of 36

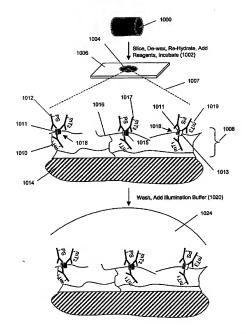


Fig. 1G

REPLACEMENT DRAWINGS
Title: ERBB HETERODIMERS AS BIOMARKERS
Inventor(s): Po-Ying Chan-Hui et al.
Atty. Docket No.: 25237-12978
Sheet 8 of 36 Illuminate, Release Molecular Tags (1026) 1025 mT2 mT3 mT2 mT2 mT1 mT1 mT3 Separate (1028) mT1 1030

Time →

Fig. 1H

REPLACEMENT DRAWINGS
Title: ERBB HETERODIMERS AS BIOMARKERS
Inventor(s): Po-Ying Chan-Hul et al.
Atty. Docket No.: 25237-12978
Sheet 9 of 36

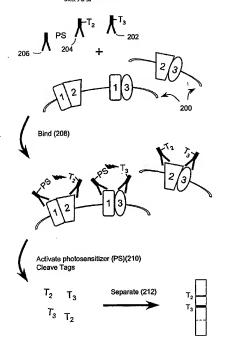


Fig. 2A

Assay	Receptor	-Specific	Antibody	Membrane	
	1	- -	J		
'	PS	T <sub>2</sub>	T <sub>3</sub>	T.	
11		T <sub>2</sub>	T <sub>3</sub>	+	
III	PS		T <sub>3</sub>	+	
IV	PS	T <sub>2</sub>	-	+	:
V	PS	T <sub>2</sub>		-	

Fig. 2B

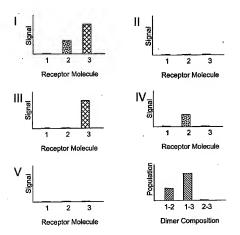
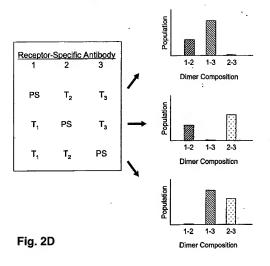
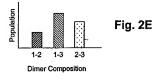


Fig. 2C

REPLACEMENT DRAWINGS
Title: ERBB HETERODIMERS AS BIOMARKERS
Inventor(s): Po-Ying Chan-Hul et al.
Atty. Docket No.: 25227-12978
Sheet 11 of 36





REPLACEMENT DRAWINGS
Title: ERBB HETERODIMERS AS BIOMARKERS
Inventor(s): Po-Ying Chan-Hui et al.
Atty, Docket No.: 25237-12978
Sheet 12 of 36

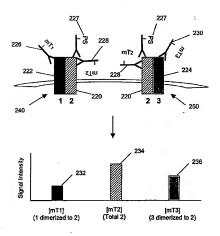


Fig. 2F

REPLACEMENT DRAWINGS
THIE: ERBB HETERODIMERS AS BIOMARKERS
Inventor(s): Po-Ying Chan-Hul et al.
Atty. Docket No.: 25237-12978
Sheet 13 of 36

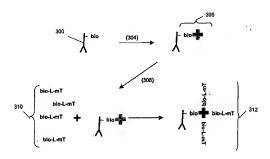


Fig. 3A

Fig. 3B

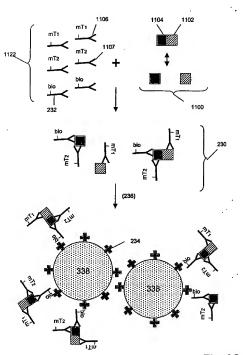


Fig. 3C

REPLACEMENT DRAWINGS
TRIE: ERBB HETERODIMERS AS BIOMARKERS
Inventor(s): Po-Ying Chan-Hui et al.
Atty. Docket No.: 25237-12978
Sheet 15 of 36

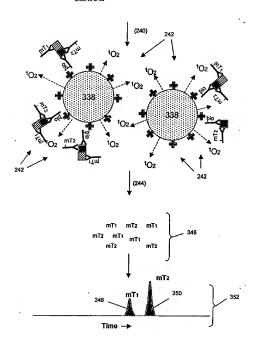


Fig. 3D

REPLACEMENT DRAWINGS Title: ERBB HETERODIMERS AS BIOMARKERS Inventor(s): Po-Ying Chan-Hul et al. Atty, Docket No.: 25237-12978 Sheet 16 of 36

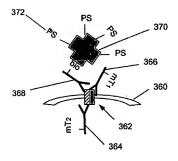


Fig. 3E

REPLACEMENT DRAWINGS
Title: ERBB HETERODIMERS AS BIOMARKERS
Inventor(s): Po-Ying Chan-Hul et al.
Atty. Docket No.: 25237-12978
Sheet 17 of 36

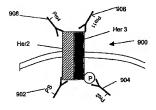


Fig. 4A

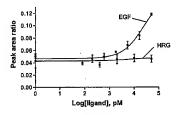


Fig. 4B

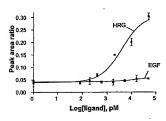


Fig. 4C

REPLACEMENT DRAWINGS
Title: ERBB HETERODIMERS AS BIOMARKERS
Inventor(s): Po-Ying Chan-Hul et al.
Atty. Docket No.: 25237-12978
Sheet 18 of 36

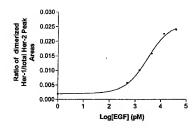


Fig. 4D

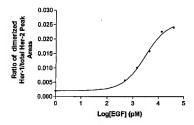


Fig. 4E

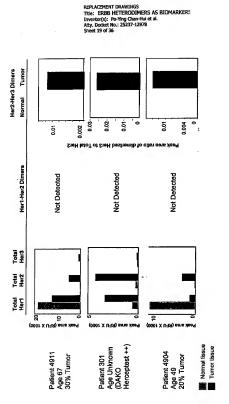
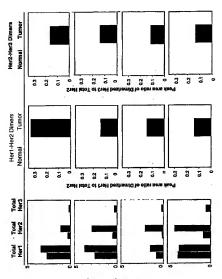


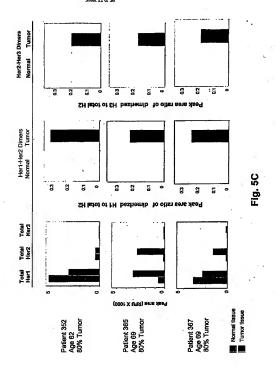
Fig. 5A



Pesk area (RFU X 1000)

Patient 358 Age 62 90% Tumor	Patient 365 Age 69 90% Tumor	Patient 362 Age 69 90% Tumor	Patient 363 Age 69 90% Tumor	Normal lissue Tumor tissue

# REPLACEMENT DRAWINGS Thie: ERBB HETERODIMERS AS BIOMARKERS Inventor(s): Po-Ying Chan-Hui et al. Atty. Docket No.: 25237-12978 Sheet 21 of 36



REPLACEMENT DRAWINGS
Title: ERBB HETERODIMERS AS BIOMARKER!
Inventor(s): Po-Ying Chan-Hui et al.
Atty, Docket No.: 25237-12978
Sheet 22 of 36

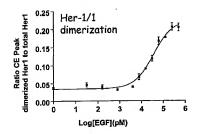


Fig. 6A

:

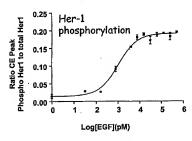
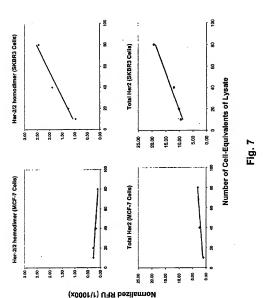


Fig. 6B



REPLACEMENT DRAWINGS
Tide: ERBB HETERODIMERS AS BIOMARKERS
Inventor(s): Po-Ying Chan-Hui et al.
Atty, Docket No.: 25237-12978
Sheet 23 of 36

Her -1/3 Phosphorylation 0.75 0.50 0.25 0.0 8 Peak area ratio of Phosphorylated Her 1/3 to Total Her3 Her -1/3 Heterodimerization 0.7 5 to Total Her3 Peak area ratio of Dimerized Her1

REPLACEMENT DRAWTINGS
TITIE: ERBB HETERODIMERS AS BIOMARKERS
Inventor(s): Po-Ying Chan-Hui et al.
Atty. Docket No.: 25237-12978
Sheet 24 of 36

REPLACEMENT DRAWINGS
Title: ERBB HETERODIMERS AS BIOMARKERS
Inventor(s): Po-Ying Chan-Hui et al.
Atty. Docket No.: 25237-12978
Sheet 25 of 36

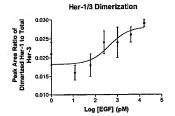


Fig. 9A

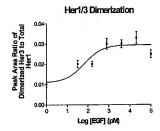


Fig. 9B

REPLACEMENT DRAWINGS
Title: ERBB HETERODIMERS AS BIOMARKERS
Inventor(s): Po-Ying Chan-Hul et al.
Atty. Docket No.: 25237-12978
Sheet 26 of 36

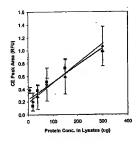


Fig. 10A

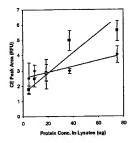


Fig. 10B

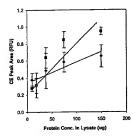


Fig. 10C

## REPLACEMENT DRAWTINGS Title: ERBB HETERODIMERS AS BIOMARKERS Inventor(s): Po-Ying Chan-Hui et al. Atty. Docket No.: 25237-12978 Sheet 27 of 36

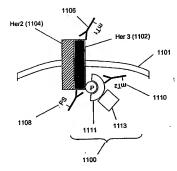


Fig. 11A

## PI3K/Her-3 Complex in MCF-7 Cells

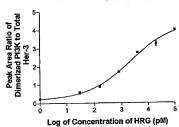


Fig. 11B

REPLACEMENT DRAWINGS
Title: - ERBB HETERODIMERS AS BIOMARKERS
Inventor(s): Po-Ying Chan-Hul et al.
Atty. Docket No.: 25237-12978
Sheet 28 of 36

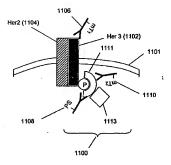


Fig. 11C

## PI3K/Her-3 Complex in MCF-7 Cells

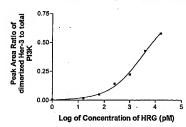


Fig. 11D

REPLACEMENT DRAWINGS
Title: ERBB HETERODIMERS AS BIOMARKERS
Inventor(s): Po-Ying Chan-Hui et al.
Atty. Docket No.: 25237-12978
Sheet 29 of 36

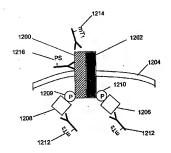


Fig. 12A

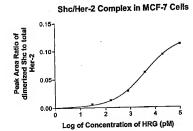


Fig. 12B

REPLACEMENT DRAWINGS
Title: ERBB HETERODIMERS AS BIOMARKERS
Inventor(s): Po-Ying Chan-Hui et al.
Atty. Docket No.: 25237-12978
Sheet 30 of 36

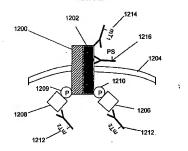


Fig. 12C

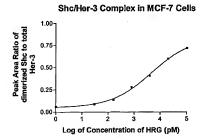


Fig. 12D

REPLACEMENT DRAWTINGS
TITIE: ERBB HETERODIMERS AS BIOMARKERS
Inventor(s): Po-Ying Chan-Hul et al.
Atty, Docket No.: 25237-12978
Sheet 31 of 36

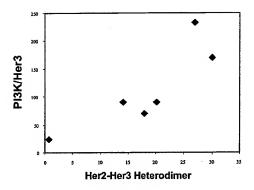
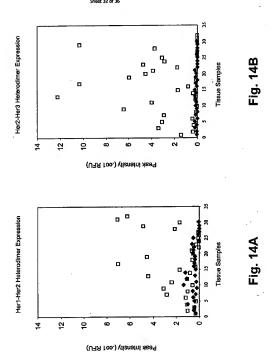


Fig. 13

REPLACEMENT DRAWINGS
Title: ERBB HETERODIMERS AS BIOMARKERS
Inventor(s): Po-Ying Chan-Hul et al.
Atty, Docket No.: 25237-12978
Sheet 32 of 36



REPLACEMENT DRAWINGS
Title: ERBB HETERODIMERS AS BIOMARKERS
Inventor(s): Po-Ying Chan-Hul et al.
Atty. Docket No.: 25237-12978
Sheet 33 of 36

#### FFPE Sections of MDA-MB-468 Cells on Glass Slides

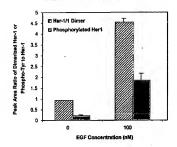


Fig. 15A

## Her-2/2 assay - MCF7 and SKBR3 paraffin sections

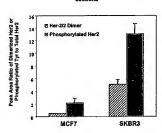


Fig. 15B

REPLACEMENT DRAWINGS
Title: ERBB HETERODIMERS AS BIOMARKERS
Inventor(s): Po-Ying Chan-Hui et al.
Atty. Docket No.: 25237-12978
Sheet 34 of 36

#### FFPE Sections of MCF-7 Cells on Glass Stides

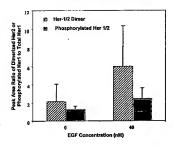


Fig. 15C

#### FFPE Sections of 22Rv1 Cells on Glass Slides

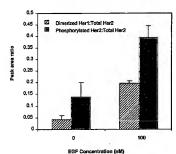


Fig. 15D

REPLACEMENT DRAWINGS
Title: ERBB HETERODIMERS AS BIOMARKERS
Inventor(s): Po-Ying Chan-Hui et al.
Atty, Docks No.: 25237-12978
Sheet 35 of 36



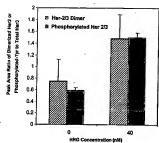


Fig. 15E

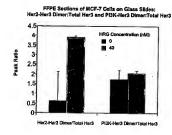


Fig. 15F

REPLACEMENT DRAWINGS
Title: ERBB HETERODIMERS AS BIOMARKERS
Inventor(s): Po-Ying Chan-Hul et al.
Atty. Docket No.: 25237-12978
Sheet 36 of 36

#### FFPE Sections of MCF-7 Cells on Glass Slides

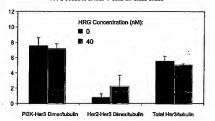


Fig. 15G